Career and College Planning Needs of Ninth Graders--as Reported by Ninth Graders

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Abstract:

Few researchers have asked students directly about what they know and need to know regarding college and career planning. Given the critical choices made early in high school, ninth graders (n = 222) were surveyed regarding their educational and career plans and the resources they were using in their decision-making. Overall results as well as differences by ethnicity, gender, and parent education group are reported. Results indicated a discrepancy between plans and accurate information about college costs and availability.

Article:

Increasingly, postsecondary education is viewed as a necessity, both for the future success of today's students as well as the nation's economic health (Hughey & Hughey, 1999; Lehman, 1996; Valadez, 1998; Wahl & Blackhurst, 2000). School systems have been challenged to ensure that today's students are better prepared "for the next leg of their educational journey" (National Commission on the High School Senior Year, 2001, p. 29; Venezia, Kirst, & Antonio, 2003), and to help students make postsecondary plans that are both realistic in nature and clearly related to their career goals (Feller, 2003; Rosenbaum & Person, 2003). Such efforts are particularly needed for groups underrepresented in postsecondary education, including students of color and those whose parents did not pursue education beyond high school, often referred to as first-generation students (Fallon, 1997; Horn & Nunez, 2000; Valadez). College-going rates for minority and lower socioeconomic students have increased, but these groups still have the lowest rates overall (Cunningham, Redmond, & Merisotis, 2003), as well as higher than average attrition rates once they enter college (Brooks-Terry, 1988). Current legislation (U.S. Department of Education, 2002) has increased pressure on educators and counselors to find new ways to help these students.

One challenge to achieving goals of increasing college-going rates is the discrepancy between college plans and college attendance. Indeed, the vast majority of high school students plan to attend college, but about half of graduates actually enroll in college directly after high school, and many of these are part-time students during their college tenure (Choy, 2002; Lehman, 1996; National Information Center for Higher Education Policymaking, 2002). In fact, the U.S. Census Bureau (2002) reported that only 26% of all adult residents have a bachelor's degree or higher. The puzzling question, then, is what happens during the high school years to change the educational aspirations of these students.

There are some hints in the literature about the gap between college plan and attendance, at least concerning the experiences of minority and lower socioeconomic students. Valadez (1998) reported that these students lack concrete knowledge from their parents to help with postsecondary planning, and Perrone, Sedlacek, and Alexander (2001) found that African-American and Hispanic students are least likely to seek help or services from vocational and academic counselors. Prospective first-generation college students face challenges as well. They may have less family support, academic preparation, and knowledge about college than students whose parent(s) attended college (Fallon, 1997; Terenzini & Springer, 1996; York-Anderson & Bowman, 1991), and their educational choices are more likely to be constrained by financial limitations and familial obligations (Inman & Mayes, 1999). Within these groups, gender also seems to directly affect both learning experiences

and feedback about career planning (Paa & McWhirter, 2000). For example, females report higher levels of parental involvement related to career planning (Trusty, Watts, & Erdman, 1997) and tend to select more realistic career paths (Morton, Kryk, Awender, & Diubaldo, 1997), while males tend to feel more discouraged and lack pertinent information about careers (Rojewski & Hill, 1998).

Although these results are informative, they do not offer sufficient direction for school counselors who want to help high school students hold onto their postsecondary educational plans. Indeed, the ASCA National Model(r) (American School Counsel or Association, 2005) explicitly cites the need for school counselors to advocate for all children and to help prepare them for the transition from high school. The model indicates that school counselors are to be aware of issues that hinder student progress and should be trained to help create solutions to these barriers. In order to do this well, school counselors must be aware of the specific needs of all students. More information regarding the needs of minority, first-generation, and low-socioeconomic students regarding their educational and career planning is clearly vital to this effort (Baker & Taylor, 1998; Valadez, 1998). One obvious resource for identifying these needs is the high school students themselves. A review of the literature, however, revealed that students' perspectives rarely have been reported. Most existing programs, it appears, are based on input from parents, teachers, and counselors, or college students' retrospective reports regarding their high school experience (Tierney & Hagedorn, 2002; Whiston, 1996). Few researchers have asked students directly what they know about college and career planning or what services they believe would be helpful to them in their decision-making.

The few existing reports are somewhat alarming. Horn, Chen, and Chapman (2003) reported that a majority of students--and their parents--overestimated tuition costs by more than 25 percent. In addition, those students potentially less able to afford college--Blacks and Hispanics, and those in families with lower household incomes and less parental education--were most likely to lack information about college costs. Other researchers (e.g., Valadez, 1998; Wahl & Blackhurst, 2000) similarly have noted that students of color often lack realistic information about college. Such reports suggest that more work is needed to identify the gaps in students' knowledge and beliefs about college and career planning, particularly those that may discourage their educational aspirations. In addition, it would be helpful to hear what resources and activities the students themselves believe would help them make informed decisions, as students may give more attention to those interventions they prefer.

PURPOSE OF THE STUDY

The purpose of this study was to determine the current educational and career plans of a group of young high school students, including the factors they were considering and the resources they were using in their planning, as well as the information and resources they desired. In line with previous research, we also wanted to determine the accuracy of their current information about college options. Given shifts in societal attitudes and job market trends (Fitzgerald & Cherpas, 1985; Jome & Tokar, 1998; Lease, 2003), we also included items to assess students' career traditionality. Finally, we tested for differences by ethnicity, gender, and parent education level to gain insights about these distinct groups of students.

We elected to survey ninth graders for two reasons. First, all ninth graders in North Carolina have had access to at least some career and college planning information in middle school. Second, ninth grade is a critical time in making decisions about high school coursework relevant to college, and choices made during this time period could either enhance or limit college options. Thus, we concluded that ninth graders would be contemplating the issues we wanted to address and so could provide reliable data regarding their knowledge, actions, and plans related to career and college planning. In addition, given the influence of parents on their children's career and educational aspirations (e.g., Fisher & Padmawidjaja, 1999; Trusty & Watts, 1996; Young et al., 2001), we also surveyed parents regarding involvement with their ninth graders in gaining career and college information as well as concerns about their children's future success.

METHOD

Participants

All 117 school districts in North Carolina were included in a stratified sampling procedure; every 14th district was identified, leading to a total of eight different districts in the sample. Because none of these were large, urban districts, a ninth district representing one of the largest school districts in the state was added as well. Of the nine, seven agreed to participate, including the newly added large district. The seven districts were located throughout the state, and they included diversity in socioeconomic status, ethnicity, academic achievement, and percentage of students continuing their education beyond high school. One school then was selected from each district for participation in the research project. An attempt was made to select schools that were representative of the overall demographics for each represented district. Six of these schools were traditional high schools and one was a junior high school.

To achieve a representative sample of the population, each school was asked to survey between 85 and 115 ninth graders selected from physical education or homeroom classes, non-core courses with a diverse group of students in each section. The actual number surveyed at each school varied, depending on the total number of students in the selected classes, as well as the total number actually present on the day of the survey distribution. Of those asked to participate (approximately 600), a total of 232 surveys were completed and returned. Of those, 10 were incomplete, leaving a total of 222 usable surveys and a conservative final response rate of 37%.

Instruments

Survey questions were created based on an in-depth review of the literature on career development in adolescents, as well as areas of expertise of the authors, drawing oil their experiences as high school counselors, administrator of college access programs, and school and career researcher. The original instrument consisted of 101 questions covering career and college needs, and a survey evaluation form requesting feedback on the instrument. Participants in a pilot study were 111 students from a single high school with an ethnically and socio-economically diverse population. As a result of the pilot study, multiple questions were altered for clarity and five questions were replaced and some procedural details were modified (e.g., survey dissemination in a classroom versus during lunchtime).

The revised Career and College Needs Survey included 101 questions on four areas related to career and college planning. At the beginning of the survey, it was explained that college referred to both community college and 4-year universities; this was reiterated in the oral instructions read to all participants. Part 1 of the survey was focused on demographic information. A second section included 44 questions related to career exploration and planning (see Table 1). This section also included a six-item career traditionality-of-attitude scale (e.g., "women make very effective company bosses," "women should not be engineers"), with a Likert scale (1 = strongly disagree, 4 = strongly agree). Internal consistency for these six items for our sample was .77. Section 3 included 26 questions focused on college knowledge (Table 1). The final section consisted of 14 questions related to academic planning and preparation (Table 1). All questions in sections 2 through 4 were answered by yes/no, multiple choice, or 4-point, Likert-type scale responses (e.g., 1 = not at all helpful, 4 = very helpful).

The brief parent form consisted of seven questions, including three demographic items (e.g., "What is the level of education for the student's mother/father?") and one question regarding factors that might prevent their student from continuing his or her education. On two open-response. questions, parents briefly described what they had done with their student related to career and college planning, and they indicated their biggest concerns related to this planning process.

Procedure

Once permissions at the district and school levels were obtained, a school liaison (e.g., the school counselor or assistant principal) was appointed to assist with data collection. The school liaison read a prepared script to all students in the participating PE or homeroom classes explaining the details of the study. Students were then given a packet containing a letter to parents explaining the purpose of the research project, a consent form, directions for completing the survey, the survey itself, and the parent survey. Students were asked to take the packet home, review the information with a parent, complete the survey, and return it to the school along with

the signed parent consent form and the parent survey. Participation was voluntary, and no penalties were given to nonparticipating students. Students who did participate were entered into a raffle for two small gifts. The completed surveys were then returned to the researchers by the school liaison. All surveys were completed during October or November of the fall semester of the students' ninth-grade year.

Data Analysis

Descriptive statistics such as percentages and frequency counts were calculated for each item for the total sample. Chi-squares and one-way ANOVAs were calculated to determine differences in ethnicity, gender, and parent education group for predetermined questions of interest. For parent education groupings, students were separated into either the prospective first-generation college student (PFG) or non-first-generation college student (NFG) group. PFGs were students who indicated that neither parent had more than a high school education.

RESULTS

Given the large amount of data gathered, highlights of results for both the overall sample and the three categories of ethnicity, gender, and parent education level are summarized below. Additional results are listed in Table 1. Only statistically significant differences for the three categories are reported. A complete, detailed listing of the results can be obtained from the first or second author upon request.

Respondent Characteristics

Of the 222 ninth graders, the majority were female (67%). Approximately 64% were Caucasian and 25% were African American; remaining respondents represented various ethnic groups (e.g., Hispanic/ Latino, Asian), although none of these groups included more than eight participants. These percentages were similar to the overall ethnic breakdown in North Carolina as well as the average percentages for the seven counties (North Carolina Department of Public Instruction, 2002). Additionally, 25% of respondents indicated that neither parent had more than a high school diploma, making them a PFG. This percentage is similar to that reported in other studies of first-generation college students (e.g., Horn & Nunez, 2000). The vast majority of respondents indicated one or both parents (77% of mothers, 88% of fathers) worked at least part-time.

Academics

Overall, most students reported being enrolled in a college/university preparation track in high school. The vast majority said they planned to attend a 4-year college after graduation and also thought their parents wanted them to attend. Most students reported that grades were very important to them and their parents. Finally, respondents tended to rate themselves academically as average or above in comparison to their peers.

Career Exploration and Planning

Of the 215 participants who identified a specific career of interest, most listed one that required a 4-year college degree or graduate degree. The majority indicated they had been interested in their career choice for 2 or more years, and had learned about it from television or a parent. Most reported that the most important thing to think about when choosing a career was whether they would enjoy the career.

In preparing for the world of work, many students reported they had already researched information about a career and talked with family or someone in their career of interest. The majority, however, had not taken a career interest inventory, talked with the school counselor, written a résumé, worked/volunteered in their career of interest, nor taken classes related to their career interests.

Students reported that parents/family had been most helpful so far with their future plans. School counselors were consulted infrequently and rated as "least helpful." Other sources (i.e., Internet sites, teacher, media) were rated as somewhat helpful overall (with wide variability of helpfulness). On a series of items, respondents indicated what type of information or tasks would be helpful in career exploration and planning. Talking with parents or friends was rated as helpful; school counselors were among the least helpful. Students also wanted

information about and exposure to different careers and help deciding on a career. Finally, overall, respondents had relatively egalitarian views related to gender and the world of work.

College Knowledge and Planning

Quality of programs, cost, and financial aid opportunities were rated most important when choosing a college. Respondents reported that finances/not enough money and academic deficits would be the main barriers preventing them from continuing their education. Their most important reasons for wanting to attend college were needing the degree for their career of choice, a better-paying job, and enjoying learning.

Approximately one-quarter of the respondents knew how much a community college in the state would cost; nearly half overestimated the cost by $3,000 or more. Only 14.4% of respondents accurately selected the cost of a private college in North Carolina, while the majority (72%) overestimated the cost. Most students also underestimated the number of community colleges and private colleges in the state. Students were most knowledgeable about public universities, but still only 20.7% knew the correct cost, and 27.5% knew the number of schools available. Most others overestimated the cost and the number available. The majority of respondents had not visited a college (65.3%) nor looked at college Web sites (50.9%).

Within-Group Differences

Where within-group differences seemed possible, one-way ANOVAs and chi-square analyses were completed to determine significance. To account for the large number of questions in each section of the survey, a more conservative estimate of significance (alpha = .01 versus .05) was used. Preliminary analyses indicated that parent education-level groups and ethnicity groupings could be analyzed separately as main effects.

Ethnicity. Due to the low number of respondents representing other ethnic groups, only differences between Caucasian and African-American students were analyzed. One significant difference emerged. Respondents differed in their view of the most important thing to think about when choosing a career, χ^2 (2,n = 194) = 11.71, $p < .005$. Although both groups said the most important factor to consider was whether they would enjoy the career, significantly more Caucasian respondents (78.9%) made this selection than did African-American respondents (58.2%). In contrast, African-American respondents more frequently selected whether they could do the career well (20% versus 14.1%) or money/salary (20% versus 5.6%) as important reasons for a career choice.

Gender. The only significant gender difference was indicators of career traditionality ($F = 36.58$, df = 1, $p < .001$), with females reporting more nontraditional, or equality, views than males (females, M = 20.31, SD = 2.73; males, M= 17.45, SD = 3.99). In addition, the traditionality of actual career choices listed by the respondents differed by gender. Using U.S. Department of Labor statistics (U.S. Census Bureau, 2002), which considers nontraditional careers as those in which the gender in question makes up 25% or less of total employed, none of the careers listed by the male respondents were coded as nontraditional. For females, however, nontraditional careers made up 15.4% of the careers listed (e.g., dentist, architect, clergy, military officer). Overall, females selected health-related careers (41.8%); writers, artists, and performers (12.6%); and social scientists, social workers, religious workers, and lawyers (11.3%). The ninth-grade boys listed writers, artists, and performers (includes sports) (20.3%); technologists and technicians (18.8%); and health-related careers (17.2%).

Prospective first-generation college students. A number of within-group differences were found for PFGs as compared to students who had at least one parent with some post-secondary education (NFG). PFG students differed significantly in their course of study as compared to NFG respondents, with 52.7% enrolled in the college/university preparatory track, as compared to 75.9% of NFGs, χ^2 (3,n = 221) = 24.59, $p < .001$. In addition, PFG students rated themselves significantly lower in their class academically, using a 5-point scale (1 = poor, 5 = near the top of the class) ($F = 14.82$, df= 1, $p < .001$) (PFGs, M = 3.27, SD = .85; NFGs, M= 3.81, SD = .92).

These students also differed in their plans for what they would do after high school, including whether they thought their parents wanted them to attend college, χ^2 (3,n = 216) = 29.27, p < .001. For PFG students, 14.8% answered "I have no idea" compared to only 3.1% of NFG students. Sixty-five percent of PFG students said they intended to continue on to a 4-year university while 18.4% planned to begin full-time work, as compared to 87.3% and 1.3%, respectively, of NFG students, χ^2 (2,n = 199) = 22.31, p < .001.

Parent responses. Most parents (n = 218) completed and returned the parent survey. They indicated that they expected their student to go to a 4-year college (77.5%) or community college (13.8%). Parents reported that finances (56.4%) and grades (12%) were the main obstacles that would prevent their student from continuing his or her education.

Responses to the two open-ended questions mirrored other survey results. Finances (n = 74), making good choices about career and college and being able to accomplish these goals (n = 38), and grades (n = 22) were the biggest concerns these parents reported related to career and college planning. Respondents also expressed concerns about maintaining their students' motivation, focus, and confidence (n = 21). In reporting activities undertaken thus far with their child related to career and college planning, the most frequent were talking about careers, colleges, and interests (n = 58) and emphasizing the need for good grades and competitive coursework (n = 28). Fewer parents reported providing encouragement (n = 14), taking their child to visit a college (n = 12), researching schools on the Internet (n = 13), and creating a college savings plan (n = 12). Many parents left this question blank or wrote "nothing" as their response (n = 53).

DISCUSSION

Similar to previous reports (Choy, 2002; Lehman, 1996; National Information Center for Higher Education Policymaking, 2002), a large majority of the North Carolina ninth graders in this study indicated that they plan to attend a 4-year or 2-year college after high school. In fact, half of the students indicated interest in careers that require a master's degree or higher. In addition, these students' aspirations matched those of their parents. Clearly, there is shared intention to pursue postsecondary education in these families. Although this result appears promising, previous reports (Choy; U.S. Census Bureau, 2002) also suggest that less than half of these students actually will achieve a bachelor's degree.

At this point, of course, we cannot say with certainty which of these students actually will achieve their educational goals. Our results do indicate, however, a consistent concern that students and parents believe will be their greatest hurdle: finances. Students reported college costs as an overriding factor in choosing a college, and financial aid was a key factor related to students' and parents' beliefs about whether the student would actually be able to attend college. What is of most concern related to this perceived barrier is the lack of accurate knowledge students reported about college costs. Similar to the high school students and parents in the Horn et al. (2003) investigation, the vast majority of respondents in this study inaccurately identified the yearly cost of attending a community college, public university, and private university, usually by overestimation, often to a substantial degree. Relatedly, few parents reported having started a college savings plan for their ninth grader. This combination of results suggests that financial concerns could be a major factor in explaining the discrepancy between college plans and college attendance.

Also of concern was the lack of active investigation related to college and career planning. Although the ninth graders were thinking and talking about their career and college options, few were visiting colleges, less than half had job-shadowed, and few had volunteered in their field of choice, even though about three fourths of them indicated they had been interested in their current career choice for at least a year. Similarly, the parents reported encouraging their students and having general conversations about future plans, but few seemed to be actively helping their students investigate the world of work or future career and college possibilities. Indeed, some parents seemed unsure of how or whether they could help. One parent wrote, "I haven't [done anything to help with planning], I don't know how," while another responded, "Just hoping she will make the right choice with help from teachers." Nevertheless, in line with other research findings (e.g., Fisher & Padmawidjaja, 1999; Trusty & Watts, 1996; Young et al., 2001), students indicated parents were the most significant influence on

their planning for the future. Clearly, parents are a key and influential resource for their students and, based on our results, need a good bit of help if they are to be effective resources.

Overall, these ninth graders appeared to know about the same amount of information related to careers and colleges, and had similar concerns and aspirations. As a group, they also expressed a desire for additional information regarding college options and career planning, suggesting they are quite open to additional information and exploration. This is important because there is a suggestion that at least some students may be relying on unrealistic or less than accurate portrayals of various careers (e.g., television shows). These students also still seemed to be at a somewhat idealistic stage of career development, basing their choices on whether they believed they would enjoy the career versus job stability, money, or ability to do the job. Although this view of career choice is not unusual for ninth graders (Johnson, 2000), these students need to be introduced to the realities of their career choices soon. It is important for this education to take place during middle and high school, when the opportunity to explore other career opportunities is readily available (Wahl & Blackhurst, 2000). Students at this age need to be receiving accurate information not only about different types of careers, but also about larger societal issues such as workplace trends and future job outlook.

There were some notable within-group differences, particularly for the prospective first-generation college students, who already were demonstrating differences in career, college, and academic planning. In contrast to their NFG peers, fewer PFGs had selected a college-preparatory track, already putting themselves at a disadvantage in terms of going to college. In addition, they rated themselves lower academically, were more likely to desire to enter the workforce immediately after graduation, and were less likely to know what their parents wanted them to do after high school. These results seem to echo reports about these students once they arrive at college (e.g., McGregor, Mayleben, Buzzanga, Davis, & Becker, 1991; Warburton, Bugarin, Nunez, & Carroll, 2001). In particular, Warburton et al. found that first-generation college students who took less rigorous coursework in high school were more likely to drop out of college than were their peers. Thus, these students' current beliefs about their academic ability and their choices of coursework may affect their long-term success. In terms of gender, male students demonstrated less egalitarian views related to careers than did the females. In addition, no male in our study intended to enter a predominantly female career.

Implications for Professional School Counselors

Results of this study offer several strong suggestions for school counselors. First, these ninth graders have not finished exploring careers, even though they stated a fairly specific, fairly stable career goal, and they are open to further exploration. This is important, because they need more information and, apparently, more accurate information about careers and college planning. And this information is needed now, in the ninth grade (or earlier), before these students and their parents eliminate college as an option due to inaccurate knowledge about actual college costs and available financial aid (cf. Osterreich, 2000). Unfortunately, in many schools, this information often is not presented until the senior year, when it is too late to assist those who might have made other postsecondary choices if they had known their realistic options earlier.

Involving--and educating--parents earlier is key. When school counselors educate parents directly, they also are influencing students indirectly as well. Many parents, however, seem to be relying on teachers and counselors to guide their children, so that extensive outreach to parents may be necessary if school counselors are to involve them in their students' planning. Programs that bring students and parents together may be particularly effective, especially if school counselors not only provide information but also facilitate parent-student conversations about educational and career goals and encourage planning for next steps (e.g., college visits). To facilitate parent-student discussions at home, school counselors can provide recommendations regarding reliable sources of information, including Web sites describing colleges and guiding educational and career planning. In some states (e.g., Utah, Georgia, Illinois), school counselors can introduce students and teachers to statewide information clearinghouses designed to increase college access. In North Carolina, school counselors, students, and their parents can access College Foundation of North Carolina (CFNC), a K-16 partnership of all 2-year and 4-year colleges in the state, the department of public instruction, and other programs contributing to college planning and career development. Middle and high school students can create personal accounts on

CFNC's Web site (www.cfnc.org) that enable them to explore career interests, keep track of their 4-year academic plan for high school, and apply online to any college in the state. The service also includes a toll-free college planning hotline, career and college planning publications, and representatives who provide outreach to schools. Such services not only are a valuable resource for school counselors, but also an instructive tool they can share with students and parents.

Additional interventions specific to male students and first-generation students also are needed. Male students will need ongoing interventions that encourage them to broaden their career options to include nontraditional careers as well as their traditional role beliefs. In fact, some researchers (e.g., Fitzgerald & Cherpas, 1985; Jome & Tokar, 1998; Lease, 2003) believe that job market trends will necessitate more males entering female-dominated careers. Programs that challenge male students' traditional beliefs early and often might be most helpful. In addition, school career fairs that include speakers from nontraditional careers could provide successful role models for young male students.

First-generation college students--and their parents-require early and ongoing attention. Our results suggest that critical differences already exist between PFG and NFG at ninth grade. Support, encouragement, and academic assistance throughout high school may increase the college-going rates of these students. For example, taking rigorous coursework in high school can decrease or erase differences between these two groups (Warburton et al., 2001). In addition, building leadership skills and teacher rapport seem to be positive influences on first-generation students (Strage, 1999).

One issue that bears attention is that students perceived their school counselors as not very helpful in career and college planning, a result also found in retrospective studies on the effectiveness of school counselors (e.g., Rowe, 1989). It is possible that school counselors lack efficacy in career counseling, limiting their ability to provide useful assistance to students (cf. Perrone, Perone, Chan, & Thomas, 2000). Also, it may be that these first-semester ninth graders had had limited interactions with their new school counselors. Another, and more hopeful, explanation is that counselors are, in fact, helpful or even very helpful, but students integrate the information into their own knowledge base and fail to attribute the help to school counselors' interventions. A student, for example, may not connect a classroom guidance lesson, or a series of lessons and other interventions, with a college or career decision. Students may be more cognizant of their ongoing conversations with parents and so attribute more influence to those interactions.

Limitation of the Study

Several limitations affect the generalizability of our results. Our sample was drawn from a single state in the Southeastern part of the United States, was predominately Caucasian and African-American, and contained more females than males. Respondents tended to rate themselves as average or above average academically, so it may be that only stronger academic students returned the survey or that respondents overstated their grades. Our respondents also may have been more focused and motivated than the average ninth grader. Should this be so, the nonrespondents may need even more help from the school counselors than reflected in our results. Finally, the relatively low response rate also suggests caution, though the rate actually may be higher than our conservative estimate.

Conclusion

Ninth graders--and their parents--are eager for information regarding educational and career planning, and they need the types of interventions school counselors can offer. Indeed, ninth grade is too late for some students, particularly prospective first-generation students. Rather, concerted efforts, K-12, are needed to ensure students--and their parents--have accurate information and the support and encouragement paramount to their postsecondary education and career development successes.

Our results are in line with the ASCA National Model (2005), which emphasizes the integral role that school counselors play in student academic success, preparing students for a range of postsecondary opportunities, including college, and career planning. In fact, our results provide some directions for these efforts. School

counselors are charged with meeting the needs of all students, and our results shed light on the particular needs of a somewhat invisible group, prospective first-generation students. The ASCA National Model also encourages collaboration with parents, an approach highlighted by our findings. Finally, our results suggest some measurable outcomes (e.g., accurate knowledge of college costs, academic self-efficacy, number of PFG students in college preparatory courses) that might be used to evaluate school counseling programs. Nevertheless, although our results provide some instructive directions, longitudinal investigations are needed to determine what factors explain the stark contradictions between students' and parents' plans to attend college versus their actual enrollment and persistence.

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Table 1. Highlights of Ninth Graders' Overall Responses Regarding Academic, Career, and College Knowledge and Planning (n = 222)

Academics	%
What are your plans after you graduate from high school?	
4-year college/university	73.4
Community college	11.3
Full-time work	5.0
Trade school	3.6
Military	3.2
Other	3.2
Do you think your parents/guardians want you to attend college?	
Definitely yes	81.5
Probably yes	9.5
Definitely not	2.3
Probably not	.5
No idea	.5
How important are grades to you?	
Very important	74.8
Important	20.3
Somewhat important	4.1
Not at all important	.9
How important are grades to your parents/guardians?	
Very important	80.6
Important	16.7
Somewhat important	2.7
Not at all important	0.0
How do you rate yourself academically in comparison to others in your class?	
Near the top of the class (5)	23.4

Above average (4)	28.8
Average (3)	41.4
Below average (2)	5.0
Poor (1)	1.4
Overall mean	3.68
(SD for this item = .93)	

Career Exploration and Planning	%

Education level required for careers of interest listed by respondents

Less than a 4-year degree (e.g., truck driver, cosmetology)	10.7
4-year degree (e.g., computer analyst, teacher)	21.4
Master's degree or higher (e.g., physician, lawyer)	50.2
Education level unclear (e.g., athlete, entertainer)	17.7

How long have you been interested in your career of interest?

2 or more years	56.8
12-24 months	22.1
3-12 months	13.5
Less than 3 months	7.2

What is the main way you learned about these types of careers?

Television	27.6
Parent	26.2
Class	19.0
Friend	10.0
Book	9.0
Internet	5.0
School counselor	3.2

What is the most important thing to think about when choosing a career?

Whether you will enjoy the career	70.7
Whether you can do the career well	16.2
Money/salary	10.4
Prestige	1.4
Current availability	1.4

What have you done to prepare for your plans after graduation? (percentages indicating yes)

Talked with my family	86.0
Researched information about a career	76.6
Talked with someone in my career of interest	60.4
Taken classes related to my career of interest	50.0
Looked at college Web sites	48.2
Job shadowing	40.1

Taken a career interest inventory	37.8
Visited a college	33.8
Talked with my school counselor	29.7
Worked/volunteered in my career of interest	29.7
Written a résumé	11.3

Who/what has helped you with your future plans? (1 = not at all helpful, 4 = very helpful)	M	SD
Parents/family	3.15	.88
Internet sites/Web sites	2.60	1.07
Teacher	2.49	1.09
Books	2.47	1.05
Friends	2.43	.99
Newspapers/TV/media	2.36	1.02
College brochures	2.34	1.09
School counselor	2.08	1.01

Who/what has been most helpful with your future plans?

Parents/family	54.5
Teacher	14.4
Friends	8.6
School counselor	6.3
Books	5.0
Newspapers/TV/media	5.0
Internet sites/Web sites	3.6
College brochures	2.7

How helpful would the following information/tasks be to you regarding careers? (ratings: 1 = not at all helpful, 4 = very helpful)	M	SD
Talking with parents or friends	2.91	.93
How to find a job	2.89	.92
Taking career interest inventories/tests	2.80	.92
Information on different careers	2.71	.91
Help with deciding on a career	2.71	.97
Exposure to different careers	2.68	.89
Talking with a school counselor	2.55	.97
Résumé writing	2.42	.96

Which of the following information/tasks would be most helpful and least helpful to you regarding careers? (asked to choose one from the following list)	% most helpful	% least helpful
Exposure to different careers	22.1	6.3
Information on different careers	17.6	7.7
Taking career interest inventories/tests	14.9	9.9
Talking with parents or friends	14.4	11.7

How to find a job	10.4	8.1
Help with deciding on a career	9.0	13.5
Talking with a school counselor	6.3	14.0
Résumé writing	4.5	27.9

College Knowledge and Planning

What do you think is important when choosing a college? (only top and bottom 3 included; 1 = not at all important, 4 = very important)	M	SD
Quality of programs (rankings)	3.26	.81
Cost	3.06	.92
Financial aid opportunities	3.03	.84
Family preference (where family wants you to go)	2.21	.91
Size of school	2.15	.99
Friend preference (where friends are going)	1.96	.90

What would be the main reason that would prevent you from going on to college?	
Finances/not enough money	47.3
Grades in school	14.0
Not prepared enough	7.2
Not able to get into the college of my choice	6.8
Family responsibilities	5.4
Lack of confidence/afraid I cannot finish	5.0
Lack of knowledge about college	2.3
Lack of family support	1.8

What are the reasons you want to go to college? (1 = not important, 4 = very important)	M	SD
Need degree for job you want	3.39	.83
More money/better-paying job	3.19	.86
Enjoy learning	2.95	.82
Parents insist you go to college	2.59	.96
Want to further explore different career options	2.58	.98
Do not want to get a full-time job after graduation	2.14	1.03

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